Charlie: You have seen these tables and figures before but C1-7 values did not follow pattern of esp-bay increase of other congeners. The memo from Pete says why. It was simply a question of detection limits not a real absence of these congeners at stations 12, 13 & 14.

Dave Hansen

51892

U.S. ENVIRONMENTAL PROTECTION AGENCY

Environmental Research Laboratory

Narragansett, R.I.

Date: October 10, 1986

Subject: Re-analysis of New Bedford Field Cores for Station 12-14

From: Dr. Peter Rogerson, Analytical Chemist

To: Mr. Dave Hansen

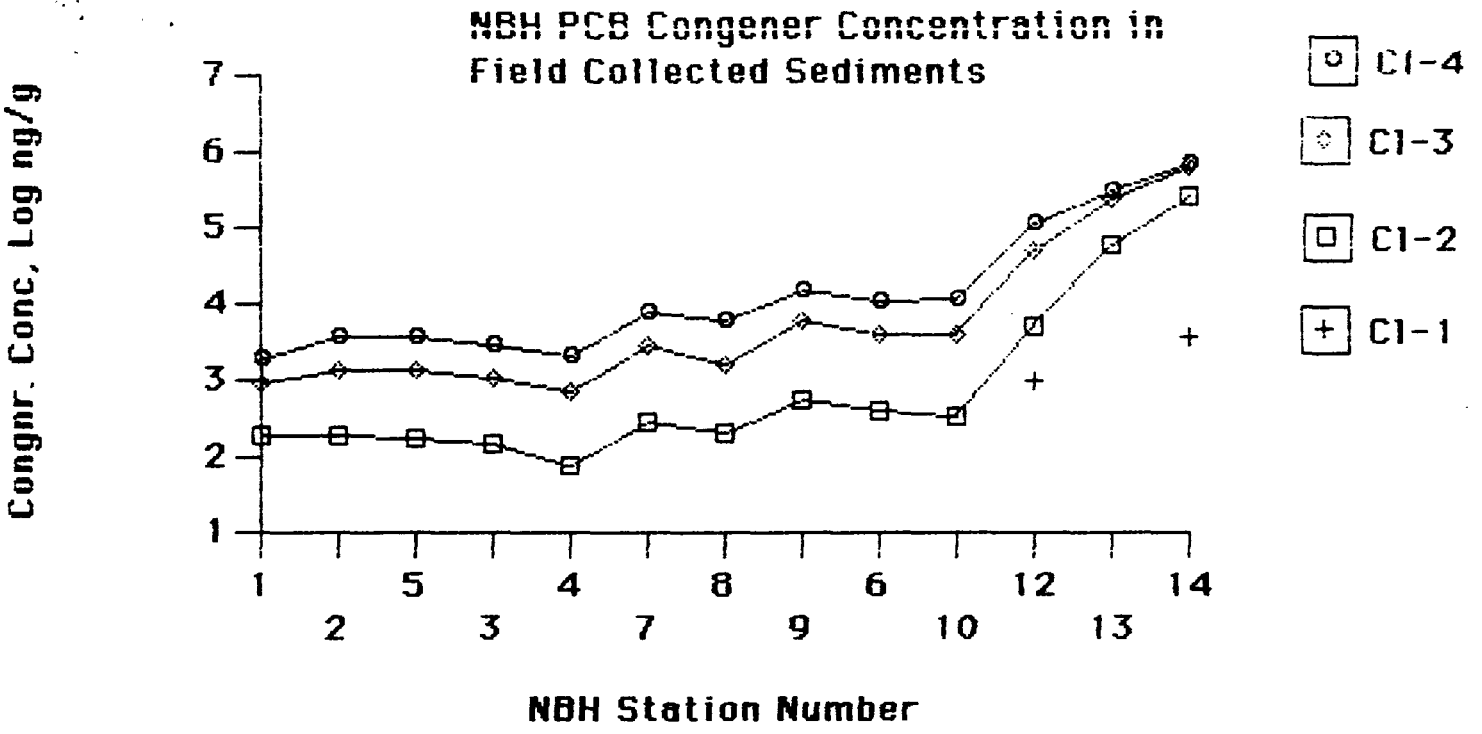
At your request, I have re-analyzed the field collected cores from New Bedford Harbor stations 12, 13, and 14 at higher electron multiplier settings on the mass spectrometer. This has the effect of increasing the sensitivity of the analysis by a factor of approximately 4 so as to make the Cl-7 PCB congeners detectable in the extracts instead of non-detectable. This has been accomplished, and the new data inserted into a spread sheet, given a new name, and revised plots made in the same format as the old plots, but with new names. Therefore, both the original and the revised data and plots are availavle.

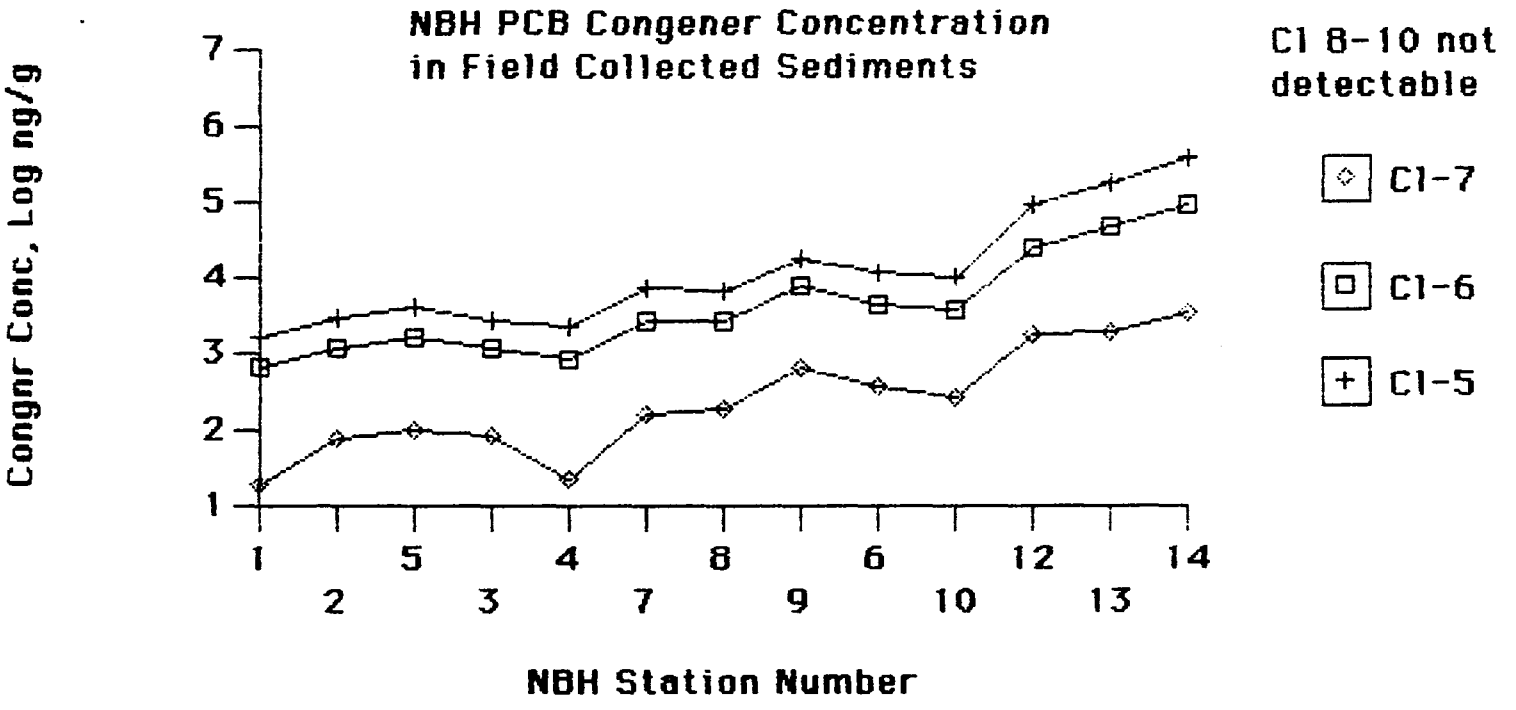
Please find attached the new plots showing the detected trends for Cl-7 PCBs. If you have any further questions, please do not hesitate to contact me.

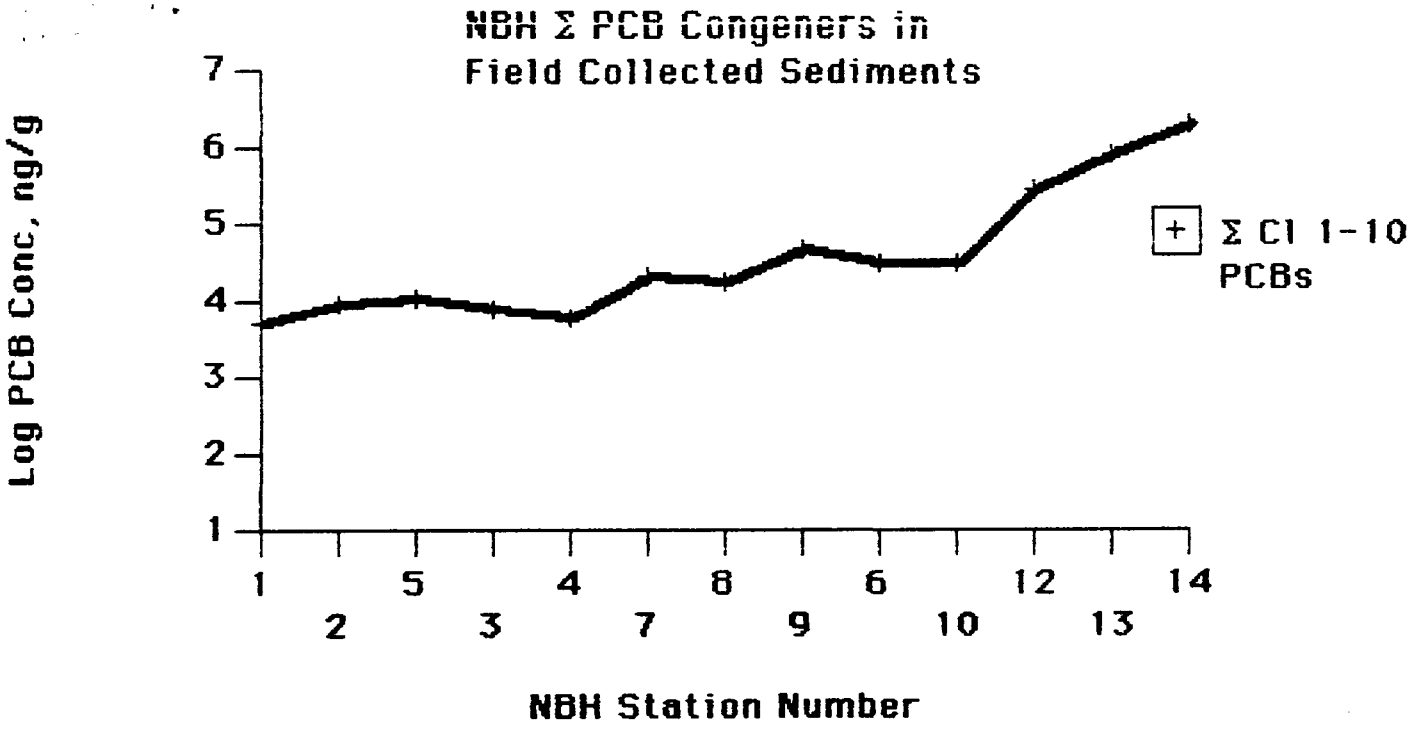
Table 7. Concentration (ug/g dry weight) of polychlorinated biphenyls (PCBs) in sediments from New Bedford Harbor. Analysis was performed by GC/MS. Concentrations are reported by chlorine number congeners, and as total PCBs. Values are composites of cores from 9 to 13 Ponar dredge samples from stations 2 to 14 in New Bedford Harbor; one dredge sample was analyzed from station 1.

Sample ID	Cl - 1	Cl - 2	Cl - 3	Cl - 4	Cl - 5	Cl - 6	Cl - 7	Cl - 8	Cl - 9	Cl - 10	Σ ug/g
NBH-1	nd*	0.20	0.93	1.9	1.7	0.65	0.02	nd*	nd*	nd*	5.3
NBH-2	nd*	0.20	1.4	3.6	3.0	1.1	0.08	nd*	nd*	nd*	9.4
NBH-3	nd*	0.18	1.4	3.9	4.0	1.6	0.10	nd*	nd*	nd*	11
NBH-4	nd*	0.15	1.0	2.9	2.7	1.2	0.08	nd*	nd*	nd*	8.0
NBH-5	nd*	0.08	0.73	2.2	2.3	0.87	0.02	nd*	nd*	nd*	6.1
NBH-6	nd*	0.30	2.9	7.8	7.1	2.7	0.17	nd*	nd*	nd*	21
NBH-7	nd*	0.21	1.7	6.1	6.8	2.6	0.19	nd*	nd*	nd*	18
NBH-8	nd*	0.55	5.9	15	17	7.5	0.67	nd*	nd*	nd*	47
NBH-9	nd*	0.39	4.0	11	12	4.5	0.37	nd*	nd*	nd*	32
NBH-10	nd*	0.36	4.1	12	10	3.9	0.27	nd*	nd*	nd*	30
NBH-12	1.0	5.2	52	122	89	25	1.8	nd*	nd*	nd*	300
NBH-13	nd*	63	250	320	176	47	2.0	nd*	nd*	nd*	850
NBH-14	3.7	280	660	740	370	90	3.4	nd*	nd*	nd*	2100

*nd = non detectable (As low as 0.02 ug/g, depending on sample dry weight and congener response)


NBH PCB Congener Concentration in
Field Collected Sediments
Congnr. Conc, Log ng/g
7
6
5
4
3
2
1
1
2
5
3
4
7
8
9
6
10
12
13
14
NBH Station Number
Cl-4
Cl-3
Cl-2
Cl-1


NBH PCB Congener Concentration
in Field Collected Sediments
Congnr Conc, Log ng/g
7
6
5
4
3
2
1
1 2 5 3 4 7 8 9 6 10 12 13 14
NBH Station Number
Cl 8-10 not detectable
Cl-7
Cl-6
Cl-5


NBH Σ PCB Congeners in
Field Collected Sediments
Log PCB Conc, ng/g
7
6
5
4
3
2
1
1
2
5
3
4
7
8
9
6
10
12
13
14
Σ Cl 1-10
PCBs
NBH Station Number